

TORREYA

July, 1901

JUNCOIDES IN THE SOUTHEASTERN STATES

BY JOHN K. SMALL

While collecting about the summit of Table Rock in western North Carolina, in company with Mr. Heller, specimens of a species of *Juncoides* in every way smaller than the so-called *Juncoides campestre* were gathered and found to be bulblet-bearing at the base. Further investigation showed that the same form had previously been collected on Lookout Mountain, Tennessee, by Prof. A. Wood and had by him been described under varietal rank, he evidently not thinking it worthy of being considered a species. Later experience with the genus in the South-east has led me to the conclusions expressed in the following brief synopsis.

JUNCOIDES Adans.

Differs from *Juncus* by its closed leaf-sheaths, the 1-celled ovary with basal placentae which support 3 ovules and later 3 seeds.

KEY TO THE SPECIES.

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| Peduncles terminated by 1 or rarely 2 flowers : capsule of an ovoid type. | 1. <i>J. pilosum</i> . |
| Peduncles terminated by compact spikes : capsule of an obovoid type. | |
| Sepals and petals 3-4 mm. long : capsules much surpassed by the perianth. | 2. <i>J. echinatum</i> . |
| Sepals and petals 2-2.5 mm. long : capsules surpassing the perianth or about equalling it. | 3. <i>J. bulbosum</i> . |

1. *JUNCOIDES PILOSUM* (L.) Kuntze. Stems 1-3 dm. tall, 2-4-leaved. Leaf-blades 3-8 mm. wide, webby, blunt and almost gland-like at the apex : peduncles filiform, equal or nearly so : perianth 2.5-3 mm. long ; sepals and petals triangular-ovate, brown except the hyaline margins : capsule usually about $\frac{1}{4}$ longer than the perianth, sometimes but slightly longer.

[The exact date of publication of each issue of TORREYA is given in the succeeding number. Vol. 1, No. 6, comprising pages 61-72, was issued June 20, 1901.]

In woods, New Brunswick to Alaska, Georgia, Tennessee, Michigan and Oregon. Also in Europe and Asia.

Luzula Carolinae S. Wats., founded on a specimen from Grandfather Mountain, North Carolina, is *Juncoides pilosum*. The elongated bract described by Dr. Watson is the upper leaf of the stem and not the bract subtending the inflorescence.

2. ***Juncoides echinatum*** n. sp. Base of plant not bulblet-bearing. Foliage webby-pubescent: stems 2.5–5 dm. tall: peduncles conspicuously unequal, each terminated by an oblong or cylindrical spike: sepals and petals lanceolate, 3–4 mm. long, acuminate, greenish or pale brown, soft and hyaline at the tip: capsule obovoid, 2.5–3 mm. long, manifestly longer than thick.

In woodlands, North Carolina to Georgia and Alabama.

This species is the representative of *Juncoides campestre* in the Southern States. The following specimens belong here:

ALABAMA: Auburn, April 17, 1897, *Earl & Baker*. (Type, in the herbarium of the New York Botanical Garden.)

NORTH CAROLINA: Biltmore, May 14, 1897, Biltmore Herb. no. 565.

3. ***Juncoides bulbosum*** (Wood). Base of plant accompanied by bulblets. Foliage almost glabrous or somewhat webby on the leaf-margins and at the top of the sheaths: stems 1–4 dm. tall: spikes shorter than those of *J. echinatum*: sepals and petals ovate-lanceolate or lanceolate, 2–2.5 mm. long, brownish, acuminate, neither manifestly soft nor hyaline at the apex: capsule broadly obovoid or globose-obovoid, surpassing the sepals or sometimes about equalling them. [*Luzula campestris* var. *bulbosa* Wood, Cl. Book, 753. 1863.]

In woods, thickets and open sandy places, Virginia to Georgia, Kansas and Texas.

This species is apparently quite common within the range given above, but very few specimens were collected until within the last four or five years. The following belong here:

VIRGINIA: Summit of White Top Mountain, June 26, 1892, *N. L. & E. G. Britton* and *A. M. Vail*.

NORTH CAROLINA: Summit of Table Rock, July 2, 1891, *J. K. Small* and *A. A. Heller*.

TENNESSEE: Lookout Mountain, *A. Wood*; Jackson, March, 1892, *S. M. Bain*, no. 172, at least in part; Franklin County,

June 8, 1897, *H. Eggert*; Knoxville, April, 1897, *A. Ruth*, no. 1101.

MISSISSIPPI: Topelo, April 6, 1889, *S. M. Tracy*.

TEXAS: Houston, April 10, 1872, *E. Hall*, no. 655; Houston, April 17, 1900, *B. F. Bush*, no. 32; Uvalde, March 20, 1891, *E. N. Plank*.

ARKANSAS: Prescott, April 9, 1900, *B. F. Bush*, no. 552
Benton County, *E. N. Plank*, no. 45.

KANSAS: Cherokee County, 1896, *A. S. Hitchcock*, no. 844.

AMSONIA AMSONIA IN NEW JERSEY

BY B. S. MILLER

May 23d a friend sent me a small specimen to identify, as it had created quite a discussion at a card party. It was seen from the roadside and picked to match a gown. Vanity, after all, is of some use in this world, as it has been the means of establishing this dainty little blue flower in New Jersey. Professor Britton verified it for me, as I saw it was not found so far north and in such a dry locality. There were fourteen clumps of this plant growing in a high, dry, rolling field, rocky and of sandy soil. It is a ten-acre lot cleared for building purposes, woods of oaks, chestnuts and hickories growing about three sides of it. The plants show evidence of being there some time, for when the grass is mown it has been cut down and old stalks are still on the roots—four or five on some. There were such plants as these growing in this same lot, which will give an idea of the poor soil. Three large patches of *Lupinus perennis*, and in the midst of one, I found six clumps of *Amsonia*; as the blue being a much more delicate shade, one could distinguish it from a distance. *Fragaria Virginiana*, *Trifolium pratense*, *Rubus Canadensis*, very abundant, *Potentilla argentea*, *Antennaria plantaginifolia*., *Chrysanthemum Leucanthemum* and small patches of *Pteridium*